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EXAMINER	
BARNES, CRYSTAL J	

ART UNIT	PAPER NUMBER
2121	11

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/086,159	ERYUREK ET AL.	
	Examiner	Art Unit	
	Crystal J. Barnes	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-46* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8,9*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The following is a Final Office Action in response to communication received on 17 February 2004. Claims 10 and 25 have been amended. Claim 46 has been added. Claims 1-46 are now pending in this application.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on 17 September 2003 and 17 February 2004 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Drawings

3. The replacement drawing sheet was received on 17 February 2004. This replacement drawing sheet is acceptable.

Response to Arguments

4. Applicant's arguments filed 17 February 2004 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., ordering parts or creating a work order for maintenance personnel) are not recited in the rejected independent claim. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 102

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-12, 19, 23-31, 38, 42 and 44-46 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,347,449 Meyer et al.

As per claim 1, the Meyer et al. reference discloses a method of automatically taking corrective measures within a process plant, wherein the process plant includes a plurality of devices, the method comprising: receiving data (see column 4 lines 62-68, "signal") pertaining to the status ("malfunction") of a device (see column 4 lines 56-61, "machines or conveying systems 1a-1e"); automatically generating an order (see column 6 lines 7-16, "intervention, check,

maintenance work") in response to a detected problem (see columns 5-6 lines 66-6, "malfunction") with the device ("machines or conveying systems 1a-1e"), wherein the detected problem ("malfunction") is based on the data ("signal") pertaining the status ("malfunction") of the device ("machines or conveying systems 1a-1e") and the order ("intervention, check, maintenance work") relates to taking one or more corrective measures (see column 6 lines 17-39, "alarm transmitter 7") to solve the problem ("malfunction"); and communicating ("transmits") the order ("intervention, check, maintenance work").

As per claim 2, the Meyer et al. reference discloses receiving data ("signal") comprises receiving diagnostic information (see column 4 lines 62-68, "type of malfunction") pertaining to the device ("machines or conveying systems 1a-1e").

As per claim 3, the Meyer et al. reference discloses receiving data ("signal") comprises receiving a maintenance request (see column 6 lines 9-12, "intervention by a maintenance specialist") to service the device ("machines or conveying systems 1a-1e").

As per claim 4, the Meyer et al. reference discloses receiving data ("signal") comprises receiving a notification (see column 6 lines 34-36, "alarm transmitter 7")

of a current problem (see columns 5-6 lines 66-6, "malfunctions") with the device ("machines or conveying systems 1a-1e").

As per claim 5, the Meyer et al. reference discloses receiving data ("signal") comprises receiving a notification (see column 5 lines 52-56, "process simulation 22") of a predicted future problem ("preview of consequences") with the device ("machines or conveying systems 1a-1e").

As per claim 6, the Meyer et al. reference discloses receiving data ("signal") comprises receiving a use index (see columns 5-6 lines 61-6, "classification of malfunction") representative of the status ("malfunction") of the device ("machines or conveying systems 1a-1e").

As per claim 7, the Meyer et al. reference discloses a maintenance system (see column 6 lines 7-16, "machine control unit 4") receives the use index ("classification of malfunction") and automatically generating an order ("intervention, check, maintenance work") comprises automatically generating a work order ("intervention, check, maintenance work") based on the use index ("classification of malfunction").

As per claim 8, the Meyer et al. reference discloses generating a work order ("intervention, check, maintenance work") comprises determining the one or more

corrective measures (see column 6 lines 17-39, "expected intervention" and column 12 lines 21-28, "necessary task") to solve the problem ("malfunction").

As per claim 9, the Meyer et al. reference discloses further comprising displaying instructions (see column 6 lines 37-39, "displays the place of the malfunction and the expected intervention" and column 12 lines 29-31, "additional information") for achieving a desired use index ("classification of malfunction") for the device ("machines or conveying systems 1a-1e").

As per claim 10, the Meyer et al. reference discloses displaying instructions ("displays ... the expected intervention") for achieving a desired use index ("classification of malfunction") for the device ("machines or conveying systems 1a-1e") comprises displaying instructions ("additional information") representative of the one or more corrective measures (see column 12 lines 11-16, "additional information on the required task") to solve the problem ("malfunction").

As per claim 11, the Meyer et al. reference discloses further comprising determining the status (see column 5 lines 3-5, "status") of the device ("machines or conveying systems 1a-1e") based on at least one of process control data (see column 4 lines 58-61, "various sensors 5") pertaining to the device ("machines or

conveying systems 1a-1e") and maintenance data ("various sensors 5") pertaining to the device ("machines or conveying systems 1a-1e").

As per claim 12, the Meyer et al. reference discloses generating an order ("intervention, check, maintenance work") comprises generating a work order ("intervention, check, maintenance work") for performing maintenance ("maintenance work") related to solving the problem ("malfunction") with the device ("machines or conveying systems 1a-1e"), and communicating the order ("intervention, check, maintenance work") comprises communicating the work order ("intervention, check, maintenance work") to one or more maintenance personnel (see column 6 lines 17-39, "maintenance specialist") capable of performing the maintenance ("maintenance work").

As per claim 19, the Meyer et al. reference discloses further comprising tracking the status of the order (see column 5 lines 3-5, "log file" and columns 15-16 lines 67-1, "each alarm is treated as a single personal order").

As per claim 23, the Meyer et al. reference discloses receiving data ("signal") comprises receiving data ("signal") pertaining to one of a field device and field equipment (see column 4 lines 56-57, "machines or conveying systems 1a-1e").

As per claim 24, the Meyer et al. reference discloses receiving data comprises receiving data pertaining to the status of one of a two-wire device, a three-wire device, a four-wire device, a wireless device, a device having a processor, a variable speed driver, a controller, a multiplexer, rotating equipment, an actuator, power generation equipment, power distribution equipment, a transmitter, a sensor, a control system, a transceiver, a valve, a positioner, a switch, electrical equipment, a server, a hand held device, a pump, an I/O system, a smart field device, a non-smart field device, a HART protocol device, a Fieldbus protocol device, a PROFIBUSOO protocol device, a WORLDFIP® protocol device, a Device-Net® protocol device, a AS-Interface protocol device, a CAN protocol device, a TCP/IP protocol device, an Ethernet device, an internet-based device, and a network communication device (see column 4 lines 58-61, "machine 1, machine control unit 4, various sensors 5"; column 6 lines 63-2, "spinning mill").

As per claim 25, the Meyer et al. reference discloses a system to be used in a process control environment for automatically taking corrective measures, wherein the process control environment includes a plurality of devices, the system comprising: a computer readable memory (see column 9 lines 62-64, "memory 343, 345, 391"); a first routine stored on the computer readable memory ("memory 343,

345, 391") and adapted to be executed on a processor ("computer 340, 390") to receive data (see column 4 lines 62-68, "signal") pertaining to the status ("status") of a device (see column 4 lines 56-61, "machines or conveying systems 1a-1e"); a second routine stored on the computer readable memory ("memory 343, 345, 391") and adapted to be executed on a processor ("computer 340, 390") to automatically generate an order (see column 6 lines 7-16, "intervention, check, maintenance work") in response to the detected problem (see columns 5-6 lines 66-6, "malfunction") with the device ("machines or conveying systems 1a-1e"), wherein the order ("intervention, check, maintenance work") relates to taking one or more corrective measure (see column 6 lines 17-39, "alarm transmitter 7") to solve the problem ("malfunction"); a third routine stored on the computer readable memory ("memory 343, 345, 391") and adapted to be executed on a processor ("computer 340, 390") to communicate the order ("intervention, check, maintenance work").

As per claim 26, the rejection of claim 2 is incorporated and further claim 26 contains limitations recited in claim 2; therefore claim 26 is rejected under the same rationale as claim 2.

As per claim 27, the rejection of claim 3 is incorporated and further claim 27 contains limitations recited in claim 3; therefore claim 27 is rejected under the same rationale as claim 3.

As per claim 28, the rejection of claim 4 is incorporated and further claim 28 contains limitations recited in claim 4; therefore claim 28 is rejected under the same rationale as claim 4.

As per claim 29, the rejection of claim 5 is incorporated and further claim 29 contains limitations recited in claim 5; therefore claim 29 is rejected under the same rationale as claim 5.

As per claim 30, the rejection of claim 6 is incorporated and further claim 30 contains limitations recited in claim 6; therefore claim 30 is rejected under the same rationale as claim 6.

As per claim 31, the rejection of claim 12 is incorporated and further claim 31 contains limitations recited in claim 12; therefore claim 31 is rejected under the same rationale as claim 12.

As per claim 38, the rejection of claim 19 is incorporated and further claim 38 contains limitations recited in claim 19; therefore claim 38 is rejected under the same rationale as claim 19.

As per claim 42, the Meyer et al. reference discloses further comprising a fifth routine stored on the computer readable memory ("memory 343, 345, 391") and adapted to be executed on a processor ("computer 340, 390") to display (see column 9 lines 65-68, "display") tracking information ("log file") relating to the status ("status") of the order ("intervention, check, maintenance work").

As per claim 44, the rejection of claim 23 is incorporated and further claim 44 contains limitations recited in claim 23; therefore claim 44 is rejected under the same rationale as claim 23.

As per claim 45, the rejection of claim 24 is incorporated and further claim 45 contains limitations recited in claim 24; therefore claim 45 is rejected under the same rationale as claim 24.

As per claim 46, the rejection of claim 1 is incorporated and further claim 46 contains limitations recited in claim 1; therefore claim 46 is rejected under the same rationale as claim 1.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 13-18, 32-37 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,347,449 Meyer et al. in view of USPN 5,515,266 to Meyer.

As per claim 13, the Meyer et al. reference discloses generating an order ("intervention, check, maintenance work") comprises generating an order ("intervention, check, maintenance work") for a part related to solving the problem ("malfunction") with the device ("machines or conveying systems 1a-1e"), and communicating the order ("intervention, check, maintenance work") comprises communicating the order ("intervention, check, maintenance work") for the part to a supplier of the part.

The Meyer et al. reference does not expressly disclose communicating an order for a part a supplier of the part.

The Meyer reference discloses

(see column 7 lines 4-8, "... repair instructions and details concerning the availability of necessary spare parts ... preset times for the corresponding service... planning the necessary works.")

(see column 8 lines 53-56, "... controls the spare part management and/or is stored with data concerning the availability of spare parts.")

(see column 9 lines 37-43, "... spare part ordering system is the logical sequence ... spare part availability and the preset times for services that enable a reasonable planning ahead of staff and material.")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the plant control computer taught by the Meyer et al. reference with the interface to a spare part ordering system taught by the Meyer reference to enable communication with a spare part management system.

One of ordinary skill in the art would have been motivated to enable communication with a spare part management system to provide spare part availability and preset times for services that enable a reasonable planning ahead of staff and material.

As per claim 14, the Meyer et al. does not expressly disclose generating an order comprises generating an order for a replacement device.

The Meyer reference discloses

(see column 7 lines 4-8, "... availability of necessary spare parts ... preset times for the corresponding service ...")

(see column 9 lines 48-50, "... single defective rolling bearings should not lead to an early replacement of all bearings ...")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the plant control computer taught by the Meyer et al. reference with the interface to a spare part ordering system taught by the Meyer reference to enable communication with a spare part management system.

One of ordinary skill in the art would have been motivated to enable communication with a spare part management system to provide spare part availability and preset times for services that enable a reasonable planning ahead of staff and material.

As per claims 15-17, the Meyer et al. reference does not expressly disclose communicating the order comprises communicating the order via the internet, a telephone communication link, and a wireless communication link, respectively.

The Meyer reference discloses

(see column 4 lines 12-21, "... communication connection with an external system ... arrange a suitable protocol ... data acquisition and processing equipment supplier ...")

(see column 7 lines 9-16, "... communication ... via an interface 42 ... suitable communication protocol ... via interfaces 588, 589 ...")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the plant control computer taught by the Meyer et al. reference with the interface taught by the Meyer reference to enable communication with a spare part management system.

One of ordinary skill in the art would have been motivated to enable communication with a spare part management system to provide spare part availability and preset times for services that enable a reasonable planning ahead of staff and material to eliminate malfunctions as quickly as possible.

As per claim 18, the Meyer et al. reference does not expressly disclose generating an order comprises scheduling an order to be fulfilled prior to failure of the device.

The Meyer reference discloses

(see column 9 lines 37-43, "... spare part ordering system is the logical sequence ... spare part availability and the preset times for services that enable a reasonable planning ahead of staff and material.")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the plant control computer taught by the Meyer et al. reference with the interface taught by the Meyer reference to enable communication with a spare part management system.

One of ordinary skill in the art would have been motivated to enable communication with a spare part management system to provide spare part availability and preset times for services that enable a reasonable planning ahead of staff and material to eliminate malfunctions as quickly as possible.

As per claim 32, the rejection of claim 13 is incorporated and further claim 32 contains limitations recited in claim 13; therefore claim 32 is rejected under the same rationale as claim 13.

As per claim 33, the rejection of claim 14 is incorporated and further claim 33 contains limitations recited in claim 14; therefore claim 33 is rejected under the same rationale as claim 14.

As per claim 34, the rejection of claim 15 is incorporated and further claim 34 contains limitations recited in claim 15; therefore claim 34 is rejected under the same rationale as claim 15.

As per claim 35, the rejection of claim 16 is incorporated and further claim 35 contains limitations recited in claim 16; therefore claim 35 is rejected under the same rationale as claim 16.

As per claim 36, the rejection of claim 17 is incorporated and further claim 36 contains limitations recited in claim 17; therefore claim 36 is rejected under the same rationale as claim 17.

As per claim 37, the rejection of claim 18 is incorporated and further claim 37 contains limitations recited in claim 18; therefore claim 37 is rejected under the same rationale as claim 18.

As per claim 43, the rejection of claim 13 is incorporated and further claim 43 contains limitations recited in claim 13; therefore claim 43 is rejected under the same rationale as claim 13.

9. Claims 20-22 and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,347,449 to Meyer et al. in view of logical reasoning.

As per claim 20, the Meyer et al. reference do not expressly disclose tracking the status of the order comprises receiving data pertaining to a report regarding the order; and receiving data pertaining to the date of the report.

However, it would have been logically to one of ordinary skill in the art to include timestamps in the log file and on the reports/display screens.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the log file taught by the Meyer et al. reference to include a timestamp as a detail for each component in the file and display the timestamp on the reports/display screens.

One of ordinary skill in the art would have been motivated to include timestamps in the log file and on the reports/display screens to facilitate another

aspect of management efficiency such as workflow turnaround or problem resolution.

As per claim 21, the Meyer et al. reference do not expressly disclose receiving data pertaining to a report comprises receiving data pertaining to the location of the order.

However, it would have been logically to one of ordinary skill in the art to include location on the reports/display screens.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the log file taught by the Meyer et al. reference to include location.

One of ordinary skill in the art would have been motivated to include location on the reports/display screens to facilitate another aspect of management efficiency such as ability to track service calls.

As per claim 22, the Meyer et al. reference do not expressly disclose receiving data pertaining to a report comprises receiving data pertaining to the status of the order.

However, it would have been logically to one of ordinary skill in the art to include status on the reports/display screens.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the log file taught by the Meyer et al. reference to include status.

One of ordinary skill in the art would have been motivated to include status on the reports/display screens to facilitate another aspect of management efficiency such as ability to track service call completion.

As per claim 39, the rejection of claim 20 is incorporated and further claim 39 contains limitations recited in claim 20; therefore claim 39 is rejected under the same rationale as claim 20.

As per claim 40, the rejection of claim 21 is incorporated and further claim 40 contains limitations recited in claim 21; therefore claim 40 is rejected under the same rationale as claim 21.

As per claim 41, the rejection of claim 22 is incorporated and further claim 41 contains limitations recited in claim 22; therefore claim 41 is rejected under the same rationale as claim 22.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to error/fault correction in general:

USPN 6,259,956 B1 to Myers et al.

USPN 6,298,377 B1 to Hartikainen et al.

USPN 6,317,701 B1 to Pyotsia et al.

USPN 6,654,801 B2 to Mann et al.

11. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 17 February 2004 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the

advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Crystal J. Barnes whose telephone number is 703.306.5448. The examiner can normally be reached on Monday-Friday alternate Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 703.308.3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cjb
9 April 2004

Anthony Knight
Supervisory Patent Examiner
Group 3600